

Amend claims 63, 65, 68, 69, 70, 71, 77, and 78, to read as follows:

SUB F3 D35
63. (Amended) The method of claim 51 wherein the molecule is a peptide or protein, or derivative, analog or fragment thereof.

SUB F4 D46
65. (Amended) The method of claim 51 wherein the molecule is a small organic molecule, a nonpeptide, or an antibody.

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68. (Amended) The method of claim 51 wherein the molecule is attached to a solid surface.

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69. (Twice Amended) A method for identifying a molecule useful for the treatment of cancer comprising carrying out the method of claim 51, further comprising the step of administering the molecule to a non-human animal having a tumor, and determining whether the molecule alters tumor progression in the non-human animal.

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70. (Twice Amended) A method for identifying a molecule useful for the treatment of an infectious disease comprising carrying out the method of claim 51, further comprising the step of administering the molecule to a non-human animal infected with a pathogen, and determining whether the molecule ameliorates the infectious disease in the non-human animal.

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71. (Twice Amended) A method for identifying a molecule useful for the treatment of an autoimmune disease comprising carrying out the method of claim 51, further comprising the step of administering the molecule to a non-human animal suffering from an autoimmune disease, and determining whether the molecule ameliorates the autoimmune disease in the non-human animal.

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77. (Amended) The method of claim 51, 68, 69, 70, 71, wherein the heat shock protein receptor is selected from the group consisting of an Hsp70 receptor, an Hsp 90 receptor, and a gp96 receptor.

SUB
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CONT.
D6
CONT.

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78. (Amended) The method of claim ~~71, 69, 70, 71~~^{1, 8, 9, 10}, wherein the heat shock protein receptor positive cells are purified from heat shock protein receptor negative cells.

Add new claims 79 to 100 to read as follows:

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79. (New) A method for screening a plurality of molecules for one or more molecules having the ability to modulate, directly or indirectly, the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells *in vitro* comprising:

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- (a) adding said plurality of molecules to a mixture of heat shock protein receptor positive cells and cytotoxic T cells under conditions conducive to the activation of cytotoxic T cells; and
 - (b) comparing antigenic cell cytotoxicity of said T cells with the cytotoxicity of T cells that are formed in the absence of said plurality of molecules,

wherein a lower or higher degree of cytotoxicity indicates that one or more molecules in said plurality of molecules modulates the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells.

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80. (New) A method for screening a molecule for the ability to modulate, directly or indirectly, the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells *in vitro* comprising:

- (a) adding the molecule to a mixture comprising (i) purified heat shock protein receptor positive cells, and (ii) cytotoxic T cells, under conditions conducive to the activation of cytotoxic T cells; and
- (b) comparing antigenic cell cytotoxicity of said T cells with the cytotoxicity of T cells that are formed in the absence of said molecule,

wherein a lower or higher degree of cytotoxicity indicates that the molecule modulates the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells.

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81. (New) A method for screening an antibody specific to a heat shock protein or a heat shock protein receptor for the ability to modulate, directly or indirectly, the ability of heat

shock receptor positive cells to stimulate the activation of cytotoxic T cells *in vitro* comprising:

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CONT.
- (a) adding the antibody to a mixture of heat shock protein receptor positive cells and cytotoxic T cells under conditions conducive to the activation of cytotoxic T cells; and
 - (b) comparing antigenic cell cytotoxicity of said T cells with the cytotoxicity of T cells that are formed in the absence of said antibody,

wherein a lower or higher degree of cytotoxicity indicates that the antibody modulates the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells.

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82. (New) A method for screening a plurality of molecules for one or more molecule(s) having the ability to modulate, directly or indirectly, antigen presentation activity of heat shock receptor positive cells comprising:

- D7
CONT.
- (a) adding said plurality of molecules to heat shock protein receptor positive cells;
 - (b) measuring antigen presentation by said heat shock protein receptor positive cells in the presence of said plurality of molecules; and
 - (c) comparing antigen presentation activity by the heat shock receptor positive cells in the presence of said plurality of molecules with the antigen presentation activity by heat shock receptor positive cells in the absence of said plurality of molecules,

wherein a lower or higher degree of antigen presentation indicates that one or more molecules in said plurality of molecules modulates the antigen presentation activity of the heat shock receptor positive cells.

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83. (New) A method for screening an antibody specific to a heat shock protein or a heat shock protein receptor for the ability to modulate, directly or indirectly, antigen presentation activity of heat shock receptor positive cells comprising:

- (a) adding an antibody specific to a heat shock protein or a heat shock protein receptor to heat shock protein receptor positive cells;
- (b) measuring antigen presentation by said heat shock protein receptor positive cells in the presence of said antibody; and

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(c) comparing antigen presentation activity by the heat shock receptor positive cells in the presence of the antibody with the antigen presentation activity by heat shock receptor positive cells in the absence of the antibody, wherein a lower or higher degree of antigen presentation indicates that the antibody modulates the antigen presentation activity of the heat shock receptor positive cells.

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84. (New) A method for screening a molecule for the ability to modulate, directly or indirectly, antigen presentation activity of heat shock receptor positive cells comprising:

- D7
CDN7.
- (a) adding a molecule to purified heat shock protein receptor positive cells;
 - (b) measuring antigen presentation by said heat shock protein receptor positive cells in the presence of said molecule; and
 - (c) comparing the antigen presentation activity by the purified heat shock receptor positive cells in the presence of the molecule with the antigen presentation activity by purified heat shock receptor positive cells in the absence of the molecule,

wherein a lower or higher degree of antigen presentation indicates that the molecule modulates the antigen presentation activity of the heat shock receptor positive cells.

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85. (New) The method of claim 82, 83, or 84, wherein measuring antigen presentation is carried out by a method comprising measuring representation of a peptide by an MHC molecule.

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86. (New) The method of claim 79, 81, 82, or 84, wherein the molecule is a peptide or protein, or derivative, analog or fragment thereof.

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87. (New) The method of claim 79, 81, 82, or 84, wherein the molecule is a small organic molecule or a nonpeptide.

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88. (New) The method of claim 87, wherein the nonpeptide is a member of a nonpeptide library.

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~~89.~~ (New) The method of claim ~~87~~, wherein the small organic molecule is a member of a small molecule library.

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~~90.~~ (New) The method of claim ~~79, 81, 82, or 84~~, wherein the molecule is attached to a solid surface.

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~~91.~~ (New) The method of claim ~~80 or 83~~, wherein the antibody is attached to a solid surface.

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~~92.~~ (New) The method of claim ~~79, 80, 81, 82, 83, or 84~~, wherein the heat shock protein receptor positive cells are macrophage or dendritic cells.

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~~93.~~ (New) A method for identifying a molecule useful for the treatment of cancer comprising carrying out the method of claim ~~79, 81, 82, or 84~~, further comprising the step of administering the molecule to a non-human animal having a tumor, and determining whether the molecule alters tumor progression in the non-human animal.

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~~94.~~ (New) A method for identifying an antibody useful for the treatment of cancer comprising carrying out the method of claim ~~80 or 83~~, further comprising the step of administering the antibody to a non-human animal having a tumor, and determining whether the antibody alters tumor progression in the non-human animal.

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~~95.~~ (New) A method for identifying a molecule useful for the treatment of an infectious disease comprising carrying out the method of claim ~~79, 81, 82, or 84~~, further comprising the step of administering the molecule to a non-human animal infected with a pathogen, and determining whether the molecule ameliorates the infectious disease in the non-human animal.

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~~96.~~ (New) A method for identifying an antibody useful for the treatment of an infectious disease comprising carrying out the method of claim ~~80 or 83~~, further comprising the step of

administering the antibody to a non-human animal infected with a pathogen, and determining whether the antibody ameliorates the infectious disease in the non-human animal.

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97. (New) A method for identifying a molecule useful for the treatment of an autoimmune disease comprising carrying out the method of claim *79, 81, 82, or 84*, further comprising the step of administering the molecule to a non-human animal suffering from an autoimmune disease, and determining whether the molecule ameliorates the autoimmune disease in the non-human animal.

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98. (New) A method for identifying an antibody useful for the treatment of an autoimmune disease comprising carrying out the method of claim *80 or 83*, further comprising the step of administering the antibody to a non-human animal suffering from an autoimmune disease, and determining whether the antibody ameliorates the autoimmune disease in the non-human animal.

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99. (New) The method of claim *79, 80, 81, 82, 83, or 84*, wherein the heat shock protein receptor is selected from the group consisting of an Hsp70 receptor, an Hsp 90 receptor, and a gp96 receptor.

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100. (New) The method of claim *79, 80, 81, 82, 83, or 84*, wherein the heat shock protein receptor positive cells are obtained by a method comprising separating the heat shock protein receptor positive cells from heat shock protein receptor negative cells.

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101. (New) The method of claim *79, 81, 82, or 84*, wherein the molecule is purified.

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102. (New) The method of claim *80 or 83*, wherein the antibody is purified.

REMARKS

Claims 51-71 and 73-78 were pending in the above-identified application. By this Second Supplemental Amendment, claims 52-54, 61, 62, and 74-76 are canceled, without

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